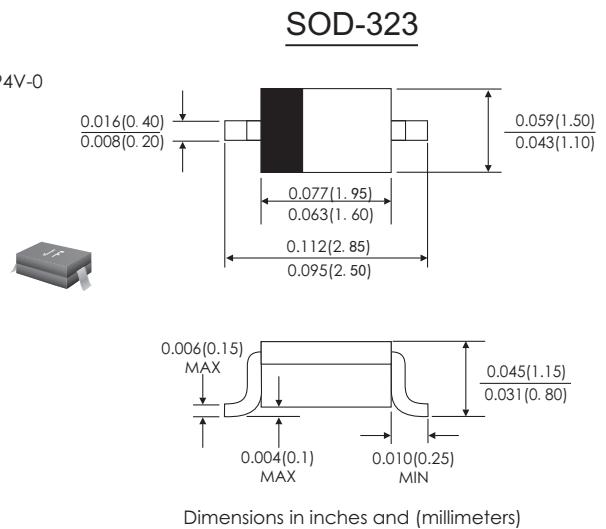


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: SOD-323 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Marking:SL



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

	Symbols	1N5819WS	Units
Maximum repetitive peak reverse voltage	V _{RRM}	40	Volts
Maximum RMS voltage	V _{RMS}	28	Volts
Maximum DC blocking voltage	V _{DC}	40	Volts
Maximum average forward rectified current	I(AV)	1.0	Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	25.0	Amps
Maximum instantaneous forward voltage at 1.0 A(note 1)	V _F	0.55	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	0.1	mA
	T _A =100°C	10	
Typical thermal resistance(Note 2)	R _{θJL}	35	°C/W
Operating junction and storage temperature range	T _J	-55 to +150	°C
	T _{STG}		

Notes: 1.Pulse test: 300μs pulse width,1% duty cycle
2.mounted on PCB with 0. 2X0. 2"(5. 0X5. 0mm)copper pads

1N5819WS

Characteristic Curves(TA=25 C unless otherwise noted)

FIG.1-FORWARD CURRENT DERATING CURVE

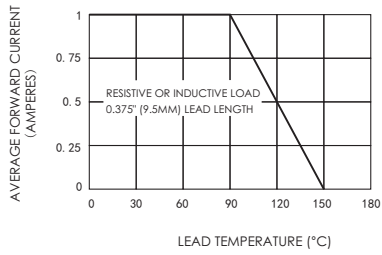


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

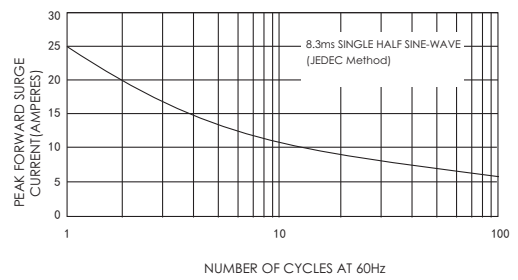


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

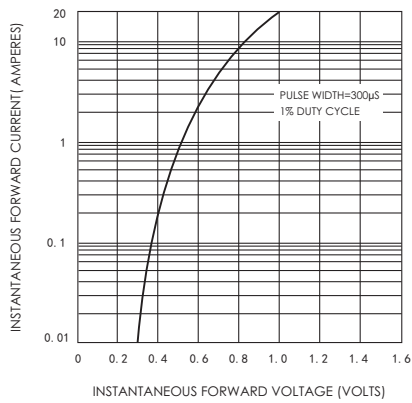


FIG.4-TYPICAL REVERSE CHARACTERISTICS

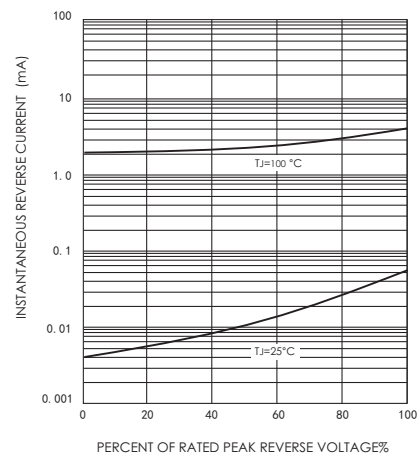


FIG.5-TYPICAL JUNCTION CAPACITANCE

